

# **APPENDIX 4-3**

## **Air Quality Permit**

Information for Appendix 4-3 is all hard copies no electronic copies exist.

# UtahAmerican Energy Inc.

P.O. Box 986  
Price, Utah 84501  
+1 (435) 613 0393  
Fax: +1 (435) 613 0393

December 22, 1998

Executive Secretary  
Division of Air Quality  
Attention: New Source Review Section  
P.O. Box 144820  
Salt Lake City, Utah 84114-4820

Dear Sir:

UtahAmerican Energy, Inc. is herein submitting a Notice of Intent for a new source for our Lila Canyon Mine.

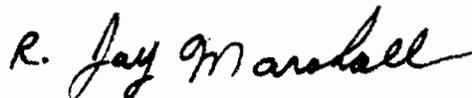
This NOI is being submitted to provide for a new underground coal mining operation in Emery County. This new operation is anticipated to begin construction in the spring of 1999 and will be in production by December 1999.

UtahAmerican Energy, Inc. is requesting approval for a throughput of up to 2,000,000 tons per year.

Based on the calculations, the facility meets the requirements of a "Minor Source". The NOI will meet requirements of a "Major Modification".

We appreciate your cooperation, and hope this plan will meet with our approval. If you have any questions, or need any further information, please contact me at (435) 613-0393.

Sincerely,



R. Jay Marshall P.E.  
Chief Engineer  
UtahAmerican Energy, Inc.



DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR QUALITY

Michael O. Leavitt  
Governor  
Dianne R. Nielson, Ph.D.  
Executive Director  
Ursula K. Trueman  
Director

150 North 1950 West  
P.O. Box 144820  
Salt Lake City, Utah 84114-4820  
(801) 536-4000 Voice  
(801) 536-4099 Fax  
(801) 536-4414 T.D.D.  
Web: [www.deq.state.ut.us](http://www.deq.state.ut.us)

DAQE-400-99

June 2, 1999

R. Jay Marshall  
Chief Engineer  
Utah American Energy, Inc.  
P. O. Box 986  
Price, Utah 84501

Dear Mr. Marshall:

Re: Intent to Approve a New Coal Mine in the Lila Canyon, Emery County  
CDS SM; ATT; NSPS, Title V

The attached document is an Intent to Approve for the above-referenced project. The Approval Order will be issued following the executive secretary's evaluation and approval.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Maung Maung. He may be reached at (801) 536-4153.

Sincerely,

  
Lynn R. Menlove, Manager  
New Source Review Section

LRM:MM:re

cc: Southeastern Utah District Health Department

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**INTENT TO APPROVE FOR A NEW COAL MINE IN THE  
LILA CANYON**

**Prepared By: Maung, Engineer  
(801) 536-4153**

**INTENT TO APPROVE NUMBER**

**DAQE-400-99**

**Date: May 27, 1999**

**Source**

**Utah American Coal Company**

**R. Jay Marshall  
(435) 613-0393**

**Ursula K. Trueman  
Executive Secretary  
Utah Air Quality Board**

### Abstract

*Utah American Energy, Inc. has proposed to construct and operate an underground coal mine in Emery County. This is a new site. The new Lila Canyon Mine will be located approximately 7 miles Southwest of Columbia, Utah.*

*Emery County is an attainment area of the national air quality standards for all pollutants. The emissions, in tons per year, are as follows: TSP = 12.95, PM<sub>10</sub> = 4.97, NO<sub>x</sub> = 19.39, SO<sub>2</sub> = 1.28, CO = 4.18, VOC = 1.58. Particulate emissions from handling coal will be mitigated by wet suppression. New Source Performance Standards (NSPS) 40 CFR subpart Y applies to this source. Therefore, Title V applies to this source. National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations do not apply to this source. A 30-day public comment period will be required before granting an approval order.*

The Notice of Intent for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Air Quality Rules (UAQR) and the Utah Air Conservation Act. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A Notice of Intent to issue an AO will be published in the Sun Advocate on June 8, 1999. A 30-day period following the publishing date will be allowed during which the proposal and evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests within 15 days of publication of the notice, a hearing will be held. The hearing will be held as close as practicable to the location of the source. Any comments received during the 30-day period and the hearing, if held, will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have before its closure. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

#### **General Conditions:**

1. This Approval Order (AO) applies to the following company:

##### Corporate Office Location

Utah American Energy, Inc.  
1382 Scenic View  
P.O. Box 986  
Price, Utah 84501  
Phone Number: (435) 613-0393  
Fax Number: (435) 613-0393

The equipment listed below in this AO shall be operated at the following location:

##### PLANT LOCATION:

From Price go East on Highway 6/191 approx. 40 miles to Horse Canyon turnoff (highway 125). Turn left on 125 and travel East approx. 4.5 miles to the junction of 125/126. Turn right on 126 and travel south on 126 approx. 2.3 miles to the site. Emery County

Universal Transverse Mercator (UTM) Coordinate System:

4,364.4 kilometers Northing; 557.0 kilometers Easting; Zone 12

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code Rule 307 (UAC R307), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence, unless specifically defined otherwise herein.
3. Utah American Energy, Inc. shall operate the Lila Canyon Mine in accordance with the terms and conditions of this AO as requested in the Notice of Intent submitted to the Division of Air Quality (DAQ) on December 24, 1998, and additional information submitted to the DAQ on February 19, 1999 and May 11, 1999.
4. At least once per calendar year, all employees who operate equipment (operator) that produces and/or controls emissions to the air shall receive proper training as to their responsibilities in operating that equipment according to all relevant conditions of this AO. The training for each operator shall be for all equipment that operator operates and the required training shall only be for pollution control equipment and/or procedures that have a direct effect on emissions to the ambient air. The equipment shall include all of the equipment listed below in Condition #5 and any other equipment that affects or produces air emissions that the operator operates. Within 60 days of every time this AO is modified or reissued, those employees who operate equipment that produces and/or controls emissions to the air that is affected by the AO changes shall receive proper training as to their responsibilities in operating equipment according to all relevant conditions of this AO. Within 60 days of a new operator being employed or assigned with the job responsibility to operate any of the equipment that produces and/or controls emissions to the air, the new operator shall receive proper training as to their responsibilities in operating the equipment according to all relevant conditions of this AO. Records of operator training shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request. This AO shall be made available to all employees who operate the equipment listed in this AO.
5. The approved installations shall consist of the following equipment or equivalent\*:
  - A. One enclosed crusher\* rated at 500 tons per hour
  - B. One truck loading facility\* with enclosed 450 tons surge bin and sprays as needed
  - C. One stacking tube with associated coal stockpile
  - D. One underpile reclaim system
  - E. Associated conveyors, mobile diesel equipment

\*Equivalency shall be determined by the executive secretary.

Any future changes or modifications to the equipment and processes approved by this AO that could affect the emissions covered by this AO must be approved in accordance with R307-401-1, UAC.

6. UtahAmerican Energy, Inc. shall notify the executive secretary in writing when the installation of the equipment listed in Condition #5 has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the executive secretary, send your correspondence to the executive secretary, attn: Compliance Section.

If construction and/or installation has not been completed within eighteen months from the date of this AO, the executive secretary shall be notified in writing on the status of the construction and/or installation. At that time, the executive secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11, UAC.

7. Visible emissions from the following emission points shall not exceed the following values:
  - A. Enclosed crusher exhaust - 20% opacity
  - B. All conveyor transfer points - 20% opacity
  - C. All diesel engines - 20% opacity
  - D. Conveyor drop points - 20% opacity
  - E. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

8. The following production and consumption limits shall not be exceeded without prior approval in accordance with R307-401, UAC:
  - A. 1,500,000 tons of coal per rolling 12-month period
  - B. 63,000 gallons of diesel fuel per rolling 12-month period

Compliance with the annual limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of consumption/production shall be kept for all periods when the plant is in operation. Records of consumption/production, including rolling 12-month totals, shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request. Production/Consumption shall be determined by examination of company coal sales records and examination of company fuel purchase records. The records of consumption/production shall be kept on a daily basis.

#### **Roads and Fugitive Dust**

9. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. The application

of water or chemical treatment shall be used. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition. The opacity shall not exceed 20% during all times the areas are in use or unless it is below freezing. Records of water and chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:

- A. Date
- B. Number of treatments made, dilution ratio, and quantity
- C. Rainfall received, if any, and approximate amount
- D. Time of day treatments were made

Records of treatment shall be made available to the executive secretary upon request and shall include a period of two years ending with the date of the request.

10. The haul road limitations shall be:

- A. 0.68 miles in length of paved road
- B. 25 miles per hour

These limitations shall not be exceeded without prior approval in accordance with R307-401, UAC. The haul road speed shall be posted.

11. Control of disturbed or stripped areas is required at all times (24-hours per day every day) for the duration of the project/operation until the area is reclaimed. Records of treatment and/or reclamation shall be kept for all periods when the plant is in operation. Records of treatment and/or reclamation shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request.

12. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the executive secretary or the executive secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made  $\frac{1}{2}$  vehicle length or greater behind the vehicle and at approximately  $\frac{1}{2}$  the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

13. The 0.68 miles of haul road shall be paved and shall be periodically swept or sprayed clean as dry conditions warrant or as determined necessary by the executive secretary. Records of cleaning paved roads shall be made available to the executive secretary or the executive secretary's representative upon request. The records shall include the two-year period prior to the date of the request.

14. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:

- A. Enclosed crusher exhaust
- B. All conveyor transfer points

The sprays shall operate whenever dry conditions warrant or as determined necessary by the executive secretary. Water sprays are not required during freezing weather conditions.

- 15. The moisture content of the material passing a #40 U.S. Standard Sieve shall be maintained at a minimum of 4.0% by weight. The moisture content shall be tested if directed by the executive secretary using the appropriate American Society of Testing and Methods (ASTM) method.
- 16. The storage piles shall be watered to minimize generation of fugitive dusts, as dry conditions warrant or as determined necessary by the executive secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation. Records of water and/or chemical treatment shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request.
- 17. The coal fines content of the stored coal shall not exceed 5.1% by weight and that of the haul roads and pile area shall not exceed 10% by weight without prior approval in accordance with R307-401, UAC. The coal fines content shall be determined if directed by the executive secretary using the appropriate ASTM method. The coal fines content is defined as all material passing a #200 U. S. Standard Sieve.

### **Fuels**

- 18. The owner/operator shall use only #2 fuel oil as a primary fuel. If any other fuel is to be used, an AO shall be required in accordance with R307-401, UAC.
- 19. The sulfur content of any fuel oil or diesel burned shall not exceed 0.5 percent by weight. Sulfur content shall be decided by ASTM Method D2880-71 or D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the executive secretary. The percent by weight of the sulfur contained in the fuel can be obtained from the fuel oil certifications. Certification of fuels shall be either by UtahAmerican Energy, Inc. own testing or test reports from the fuel marketer. Records of fuel supplier's test report on sulfur content shall be available on-site for each load delivered.

### **Federal Limitations and Requirements**

- 20. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS)<sup>1</sup> Subpart A, 40 CFR 60.1 to 60.18 and Subpart Y, 40 CFR 60.250 to 60.254 (Standards of Performance for Coal Preparation Plants) apply to this installation. The facility must operate in accordance with the most current version of 40 CFR 60 applicable to this plant.

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<sup>1</sup> NSPS = New Source Performance Standards.

21. For sources that are subject to NSPS, opacity standards shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). It is the responsibility of the owner/operator of the source to supply these observations to the executive secretary. A currently certified observer must be used for these observations. Emission points that are subject to the initial observations are:
- A. Enclosed crusher exhaust
  - B. Coal processing and conveying equipment
  - C. Coal storage systems
  - D. Coal transfer and loading systems
  - E. All conveyor transfer points

### Records & Miscellaneous

22. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control equipment approved by this approval order shall be installed, maintained, and operated according to standard operating practices that will ensure that the air quality limits set forth in this AO will be met. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years. All necessary equipment control and operating devices, such as pressure gauges, amp meters, volt meters, flow-rate indicators, temperature gauges, CEMS, etc., shall be installed and operated properly and easily accessible to compliance inspectors. A copy of all the manufacturers' and company's own subsequent operating instructions for pollution control equipment and pollution emitting equipment shall be kept on site. These instructions shall be available to all employees who operate the equipment and shall be made available to compliance inspectors upon their request. Maintenance records shall be made available to the executive secretary or executive secretary's representative upon request, and the records shall include the two-year period prior to the date of the request.
23. The owner/operator shall comply with UAC, R307-150 Series. Inventories, Testing and Monitoring. This rule addresses regulated pollutant and hazardous air pollutant emission inventory reporting requirements, and emission statement inventory requirements. Each owner or operator of a stationary source subject to the emission statement inventory (R307-150-1) rule shall maintain for a period of five years from the due date of each emission statement, a copy of the emission statement submitted to the Division of Air Quality and records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

The full text of UAC R307-150 Series, Inventories, Testing and Monitoring is included as Appendix A. However, to be in compliance, this facility must operate in accordance with the most current version of R307-150 or the applicable section(s), if renumbered.

24. The owner/operator shall comply with R307-107, UAC. This rule addresses unavoidable breakdown reporting requirements. Any breakdown lasting longer than two hours shall be reported to the executive secretary within three hours of the breakdown if reasonable, but in no case longer than 18 hours after the beginning of the breakdown. During times other than normal office hours, breakdowns for any period longer than two hours shall be initially reported to the Environmental Health Emergency Response Coordinator. Within seven calendar days of the beginning of any breakdown lasting longer than two hours, a written report shall be submitted to the executive secretary. The owner/operator shall calculate/estimate the excess emissions (amount above AO limits) whenever a breakdown occurs. The total of excess emissions per calendar year shall be reported to the executive secretary with the inventory submittal, or as directed by the executive secretary. The owner or operator of an installation suffering an unavoidable breakdown shall assure that emission limitations and visible emission limitations are exceeded for only as short a period of time as reasonable. The owner or operator shall take all reasonable measures which may include but are not limited to the immediate curtailment of production, of operations, or activities at all installations of the source if necessary to limit the total aggregate emissions from the source to be no greater than the aggregate allowable emissions averaged over the periods provided in the source's approval orders.

All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the executive secretary or executive secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for a period of two years. A summary of those records that are required as part of this Approval Order is included herein. This summary shall not be considered an additional requirement, but is included for informational purposes only. The condition that requires that these records be kept as part of the compliance with this AO is listed following the individual record. Examples of records to be kept at this source shall include the following as applicable:

Operator Training	(Condition number 4)
Consumption/Production rate	(Condition number 8)
Water Treatment	(Condition number 9, 11 & 16)
Fugitive emission control	(Condition number 13)
Sulfur content in diesel fuel	(Condition number 19)
Maintenance records	(Condition number 22)
Emission inventory	(Condition number 23)
Upset, breakdown episodes	(Condition number 24)

The list above may not be a complete list of all records that are required to be kept by UtahAmerican Energy, Inc. For a complete list of required records check all AO conditions, and all applicable Federal regulations such as NSPS standards that apply to this source.

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-401, UAC.

The executive secretary shall be notified in writing if the company is sold or changes its name. The notification shall be submitted within 30 days of such action.

Under R307-150-1, UAC, The executive secretary may require a source to submit an emission inventory for any full or partial year on reasonable notice.

Organizations have the responsibility to take whatever steps are necessary to ensure continued full compliance with environmental laws and regulations including undertaking whatever steps are necessary and appropriate to assure the accuracy of information and data required to be reported to the U.S. EPA and state programs. This includes a full Year 2000 issues assessment of the possible vulnerabilities of data systems, monitoring and operating systems and embedded computer chips that are relied upon for business operation or as part of the data gathering and reporting process. Failure to comply with requirements because of Year 2000 problems may be considered violations and may result in enforcement.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

Reorganization or change of rules of the Utah Air Quality Board resulted in the Utah Administrative Code (UAC) numbering being changed for rules cited in this AO. In the future there may be additional changes in the UAC rule numbering and/or content. A document is available that will cross reference old rules with new rules that have been renumbered or changed. If the rules are changed in the future an updated cross reference will be made available to the public. A change in the rules does not eliminate the requirement to comply with the new referenced rule.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: [http://www.eq.state.ut.us/eqair/aq\\_home.htm](http://www.eq.state.ut.us/eqair/aq_home.htm)

R307-12 is the rule currently in force for Fugitive Emissions & Fugitive Dust. A proposal to revise it is under consideration by the Air Quality Board. When the revision is complete, the rules for fugitive emissions and fugitive dust may be designated as R307-205 and R307-309.

Annual emissions for this source (the entire plant) are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	TSP .....	12.95
B.	PM <sub>10</sub> .....	4.97
C.	SO <sub>2</sub> .....	1.28
D.	NO <sub>x</sub> .....	19.39
E.	CO .....	4.18
F.	VOC .....	1.58

The annual emission estimations above are for the purpose of determining the applicability of Prevention of Significant Deterioration, nonattainment area, Maintenance area, and Title V source requirements of the UAC R307. They are not to be used for purposes of determining compliance.

DAQE-400-99

Page 10

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. Unless public comments are received which require additional work, the fee for this AO will be \$2,400.00. An invoice will follow. You may pay this fee prior to the end of the comment period. If there are comments or additional fees, you will be notified.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lynn R. Menlove", is written over a horizontal line.

Lynn R. Menlove, Manager  
New Source Review Section

## Appendix A

UtahAmerican Energy, Inc.  
Lila Canyon Coal Mine

### **R307-150. Emission Inventories.**

#### **R307-150-1. General Applicability.**

(1) The following sources shall submit an emission inventory report:

- (a) any Part 70 source;
- (b) any source that emits or is allowed under R307 to emit 100 ton per year or more of any regulated air pollutant;
- (c) any source located in Davis, Salt Lake, Utah or Weber County that emits or is allowed under R307 to emit 25 tons per year or more of a combination of PM10, sulfur oxides, or oxides of nitrogen;
- (d) any source located in Davis, Salt Lake, Utah or Weber County that emits or is allowed under R307 to emit 10 tons per year or more of volatile organic compounds;
- (e) any source that emits or is allowed under R307 to emit 5 tons per year or more of lead;
- (f) any source that emits or is allowed under R307 to emit 10 tons or more per year of ammonia;
- (g) any source that is allowed under R307 to emit between 90 and 100 tons per year of any regulated air pollutant;
- (h) any source that the executive secretary requires to submit an inventory for any full or partial year on reasonable notice.

### **R307-155. Hazardous Air Pollutant Inventory.**

#### **R307-155-1. General Applicability.**

- (1) The owner or operator of a Part 70 stationary source, either "major source" or "area source" as defined in the Clean Air Act Section 112 (42 U.S.C. 7412), that emits one or more hazardous air pollutants shall submit a hazardous air pollutant inventory.
- (2) The owner or operator of a source which is not a Part 70 stationary source or a "major source" as defined in the Clean Air Act Section 112 (42 U.S.C. 7412) that emits one or more hazardous air pollutants shall submit a hazardous air pollutant inventory at the request of the executive secretary but not more often than once per year.
- (3) Inventory data is not required for each hazardous air pollutant that has a threshold limit value and is emitted in an amount less than the smaller of the following:
  - (a) 500 pounds per year; or
  - (b) an annual emission level calculated to be the applicable threshold limit value - time weighted average (TLV-TWA) expressed in milligrams per cubic meter, or the threshold limit value - ceiling (TLV-C) expressed in milligrams per cubic meter multiplied by the appropriate emission threshold factor in cubic meter pounds per milligram year in Table 1 below.

TABLE 1

CONTAMINANT	FACTOR (in cubic meter pounds per milligram year)
Arsenic	21.22
Benzene	21.22
Beryllium	21.22
Ethylene oxide	21.22
Formaldehyde	15.81
All other acute hazardous air pollutants	15.81
All other chronic hazardous air pollutants	21.22
All other carcinogenic hazardous air pollutants	7.07



DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR QUALITY

Michael O. Leavitt  
Governor

Dianne R. Nielson, Ph.D.  
Executive Director

Ursula K. Trueman  
Director

150 North 1950 West  
P.O. Box 144820  
Salt Lake City, Utah 84114-4820  
(801) 536-4000 Voice  
(801) 536-4099 Fax  
(801) 536-4414 T.D.D.  
Web: www.deq.state.ut.us

DAQE-702-99

August 27, 1999

R. Jay Marshall  
Chief Engineer  
Utah American Energy, Inc.  
P. O. Box 986  
Price, Utah 84501

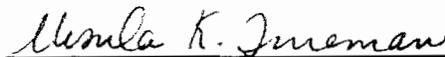
Dear Mr. Marshall:

Re: Approval Order for a New Coal Mine in the Lila Canyon  
Emery County - CDS SM; ATT; NSPS, Title V

The attached document is an Approval Order for the above-referenced subject.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Maung Maung. He may be reached at (801) 536-4153.

Sincerely,

  
Ursula K. Trueman, Executive Secretary  
Utah Air Quality Board

UKT:MM:aj

cc: Southeastern Utah District Health Department

RECEIVED AUG 30

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**APPROVAL ORDER FOR A NEW COAL MINE IN THE LILA  
CANYON**

**Prepared By: Maung Maung, Engineer  
(801) 536-4153**

**APPROVAL NUMBER**

**DAQE-702-99**

**Date: August 27, 1999**

**Source Contact**

**Utah American Energy, Inc.**

**R. Jay Marshall  
(435) 613-0393**

**Ursula K. Trueman  
Executive Secretary  
Utah Air Quality Board**

### *Abstract*

*Utah American Energy, Inc. has proposed to construct and operate an underground coal mine in Emery County. This is a new site. The new Lila Canyon Mine will be located approximately seven miles southwest of Columbia, Utah.*

*Emery County is an attainment area of the national air quality standards for all pollutants. The emissions, in tons per year, are as follows: TSP = 12.95, PM<sub>10</sub> = 4.97, NO<sub>x</sub> = 19.39, SO<sub>2</sub> = 1.28, CO = 4.18, VOC = 1.58. Particulate emissions from handling coal will be mitigated by wet suppression. New Source Performance Standards (NSPS) 40 CFR subpart Y applies to this source. Therefore, Title V applies to this source. National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations do not apply to this source. A 30-day public comment period was required before granting an Approval Order (AO).*

The above-referenced project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this AO reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order:

#### **General Conditions:**

1. This Approval Order (AO) applies to the following company:

##### Corporate Office Location

Utah American Energy, Inc.  
1382 Scenic View  
P.O. Box 986  
Price, Utah 84501  
Phone Number: (435) 613-0393  
Fax Number: (435) 613-0393

The equipment listed below in this AO shall be operated at the following location:

##### PLANT LOCATION:

From Price go East on Highway 6/191 approx. 40 miles to Horse Canyon turnoff (highway 125). Turn left on 125 and travel East approx. 4.5 miles to the junction of 125/126. Turn right on 126 and travel south on 126 approx. 2.3 miles to the site. Emery County

##### Universal Transverse Mercator (UTM) Coordinate System:

4,364.4 kilometers Northing; 557.0 kilometers Easting; Zone 12

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code Rule 307 (UAC R307), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence, unless specifically defined otherwise herein.

3. Utah American Energy, Inc. shall operate the Lila Canyon Mine in accordance with the terms and conditions of this AO as requested in the Notice of Intent submitted to the Division of Air Quality (DAQ) on December 24, 1998, and additional information submitted to the DAQ on February 19, 1999 and May 11, 1999.
4. At least once per calendar year, all employees who operate equipment (operator) that produces and/or controls emissions to the air shall receive proper training as to their responsibilities in operating that equipment according to all relevant conditions of this AO. The training for each operator shall be for all equipment that operator operates and the required training shall only be for pollution control equipment and/or procedures that have a direct effect on emissions to the ambient air. The equipment shall include all of the equipment listed below in Condition #5 and any other equipment that affects or produces air emissions that the operator operates. Within 60 days of every time this AO is modified or reissued, those employees who operate equipment that produces and/or controls emissions to the air that is affected by the AO changes shall receive proper training as to their responsibilities in operating equipment according to all relevant conditions of this AO. Within 60 days of a new operator being employed or assigned with the job responsibility to operate any of the equipment that produces and/or controls emissions to the air, the new operator shall receive proper training as to their responsibilities in operating the equipment according to all relevant conditions of this AO. Records of operator training shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request. This AO shall be made available to all employees who operate the equipment listed in this AO.
5. The approved installations shall consist of the following equipment or equivalent\*:
  - A. One enclosed crusher\* rated at 500 tons per hour
  - B. One truck loading facility\* with enclosed 450 tons surge bin and sprays as needed
  - C. One stacking tube with associated coal stockpile
  - D. One underpile reclaim system
  - E. Associated conveyors, mobile diesel equipment

\*Equivalency shall be determined by the executive secretary.

Any future changes or modifications to the equipment and processes approved by this AO that could affect the emissions covered by this AO must be approved in accordance with R307-401-1, UAC.

6. Utah American Energy, Inc. shall notify the executive secretary in writing when the installation of the equipment listed in Condition #5 has been completed and is operational,

as an initial compliance inspection is required. To insure proper credit when notifying the executive secretary, send your correspondence to the executive secretary, attn: Compliance Section.

If construction and/or installation has not been completed within eighteen months from the date of this AO, the executive secretary shall be notified in writing on the status of the construction and/or installation. At that time, the executive secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11, UAC.

7. Visible emissions from the following emission points shall not exceed the following values:
  - A. Enclosed crusher exhaust - 20% opacity
  - B. All conveyor transfer points - 20% opacity
  - C. All diesel engines - 20% opacity
  - D. Conveyor drop points - 20% opacity
  - E. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

8. The following production and consumption limits shall not be exceeded without prior approval in accordance with R307-401, UAC:
  - A. 1,500,000 tons of coal per rolling 12-month period
  - B. 63,000 gallons of diesel fuel per rolling 12-month period

Compliance with the annual limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of consumption/production shall be kept for all periods when the plant is in operation. Records of consumption/production, including rolling 12-month totals, shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request. Production/Consumption shall be determined by examination of company coal sales records and examination of company fuel purchase records. The records of consumption/production shall be kept on a daily basis.

### **Roads and Fugitive Dust**

9. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. The application of water or chemical treatment shall be used. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition. The opacity shall not exceed 20% during all times the areas are in use or

unless it is below freezing. Records of water and chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:

- A. Date
- B. Number of treatments made, dilution ratio, and quantity
- C. Rainfall received, if any, and approximate amount
- D. Time of day treatments were made

Records of treatment shall be made available to the executive secretary upon request and shall include a period of two years ending with the date of the request.

10. The haul road limitations shall be:

- A. 0.68 miles in length of paved road
- B. 25 miles per hour

These limitations shall not be exceeded without prior approval in accordance with R307-401, UAC. The haul road speed shall be posted.

11. Control of disturbed or stripped areas is required at all times (24-hours per day every day) for the duration of the project/operation until the area is reclaimed. Records of treatment and/or reclamation shall be kept for all periods when the plant is in operation. Records of treatment and/or reclamation shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request.

12. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the executive secretary or the executive secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made  $\frac{1}{2}$  vehicle length or greater behind the vehicle and at approximately  $\frac{1}{2}$  the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

13. The 0.68 miles of haul road shall be paved and shall be periodically swept or sprayed clean as dry conditions warrant or as determined necessary by the executive secretary. Records of cleaning paved roads shall be made available to the executive secretary or the executive secretary's representative upon request. The records shall include the two-year period prior to the date of the request.

14. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:

- A. Enclosed crusher exhaust
- B. All conveyor transfer points

The sprays shall operate whenever dry conditions warrant or as determined necessary by the executive secretary. Water sprays are not required during freezing weather conditions.

- 15. The moisture content of the material passing a #40 U.S. Standard Sieve shall be maintained at a minimum of 4.0% by weight. The moisture content shall be tested if directed by the executive secretary using the appropriate American Society of Testing and Methods (ASTM) method.
- 16. The storage piles shall be watered to minimize generation of fugitive dusts, as dry conditions warrant or as determined necessary by the executive secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation. Records of water and/or chemical treatment shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request.
- 17. The coal fines content of the stored coal shall not exceed 5.1% by weight and that of the haul roads and pile area shall not exceed 10% by weight without prior approval in accordance with R307-401, UAC. The coal fines content shall be determined if directed by the executive secretary using the appropriate ASTM method. The coal fines content is defined as all material passing a #200 U. S. Standard Sieve.

#### **Fuels**

- 18. The owner/operator shall use only #2 fuel oil as a primary fuel. If any other fuel is to be used, an AO shall be required in accordance with R307-401, UAC.
- 19. The sulfur content of any fuel oil or diesel burned shall not exceed 0.5 percent by weight. Sulfur content shall be decided by ASTM Method D2880-71 or D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the executive secretary. The percent by weight of the sulfur contained in the fuel can be obtained from the fuel oil certifications. Certification of fuels shall be either by Utah American Energy, Inc. own testing or test reports from the fuel marketer. Records of fuel supplier's test report on sulfur content shall be available on-site for each load delivered.

#### **Federal Limitations and Requirements**

- 20. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS)<sup>1</sup> Subpart A, 40 CFR 60.1 to 60.18 and Subpart Y, 40 CFR 60.250 to 60.254 (Standards of Performance for Coal Preparation Plants) apply to this installation. The facility must operate in accordance with the most current version of 40 CFR 60 applicable to this plant.

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<sup>1</sup> NSPS = New Source Performance Standards.

21. For sources that are subject to NSPS, opacity standards shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be three hours (thirty six-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). It is the responsibility of the owner/operator of the source to supply these observations to the executive secretary. A currently certified observer must be used for these observations. Emission points that are subject to the initial observations are:
- A. Enclosed crusher exhaust
  - B. Coal processing and conveying equipment
  - C. Coal storage systems
  - D. Coal transfer and loading systems
  - E. All conveyor transfer points

**Records & Miscellaneous**

22. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control equipment approved by this AO shall be installed, maintained, and operated according to standard operating practices that will ensure that the air quality limits set forth in this AO will be met. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years. All necessary equipment control and operating devices, such as pressure gauges, amp meters, volt meters, flow-rate indicators, temperature gauges, CEMS, etc., shall be installed and operated properly and easily accessible to compliance inspectors. A copy of all the manufacturers' and company's own subsequent operating instructions for pollution control equipment and pollution emitting equipment shall be kept on site. These instructions shall be available to all employees who operate the equipment and shall be made available to compliance inspectors upon their request. Maintenance records shall be made available to the executive secretary or executive secretary's representative upon request, and the records shall include the two-year period prior to the date of the request.
23. The owner/operator shall comply with UAC, R307-150 Series. Inventories, Testing and Monitoring. This rule addresses regulated pollutant and hazardous air pollutant emission inventory reporting requirements, and emission statement inventory requirements. Each owner or operator of a stationary source subject to the emission statement inventory (R307-150-1) rule shall maintain for a period of five years from the due date of each emission statement, a copy of the emission statement submitted to the Division of Air Quality and records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

The full text of UAC R307-150 Series, Inventories, Testing and Monitoring is included as Appendix A. However, to be in compliance, this facility must operate in accordance with the most current version of R307-150 or the applicable section(s), if renumbered.

24. The owner/operator shall comply with R307-107, UAC. This rule addresses unavoidable breakdown reporting requirements. Any breakdown lasting longer than two hours shall be reported to the executive secretary within three hours of the breakdown if reasonable, but in no case longer than 18 hours after the beginning of the breakdown. During times other than normal office hours, breakdowns for any period longer than two hours shall be initially reported to the Environmental Health Emergency Response Coordinator. Within seven calendar days of the beginning of any breakdown lasting longer than two hours, a written report shall be submitted to the executive secretary. The owner/operator shall calculate/estimate the excess emissions (amount above AO limits) whenever a breakdown occurs. The total of excess emissions per calendar year shall be reported to the executive secretary with the inventory submittal, or as directed by the executive secretary. The owner or operator of an installation suffering an unavoidable breakdown shall assure that emission limitations and visible emission limitations are exceeded for only as short a period of time as reasonable. The owner or operator shall take all reasonable measures which may include but are not limited to the immediate curtailment of production, of operations, or activities at all installations of the source if necessary to limit the total aggregate emissions from the source to be no greater than the aggregate allowable emissions averaged over the periods provided in the source's AOs.

All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the executive secretary or executive secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for a period of two years. A summary of those records that are required as part of this AO is included herein. This summary shall not be considered an additional requirement, but is included for informational purposes only. The condition that requires that these records be kept as part of the compliance with this AO is listed following the individual record. Examples of records to be kept at this source shall include the following as applicable:

Operator training	(Condition number 4)
Consumption/production rate	(Condition number 8)
Water treatment	(Condition number 9, 11 & 16)
Fugitive emission control	(Condition number 13)
Sulfur content in diesel fuel	(Condition number 19)
Maintenance records	(Condition number 22)
Emission inventory	(Condition number 23)
Upset, breakdown episodes	(Condition number 24)

The list above may not be a complete list of all records that are required to be kept by Utah American Energy, Inc. For a complete list of required records check all AO conditions, and all applicable Federal regulations such as NSPS standards that apply to this source.

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-401, UAC.

The executive secretary shall be notified in writing if the company is sold or changes its name. The notification shall be submitted within 30 days of such action.

Under R307-150-1, UAC, The executive secretary may require a source to submit an emission inventory for any full or partial year on reasonable notice.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: [http://www.eq.state.ut.us/eqair/aq\\_home.htm](http://www.eq.state.ut.us/eqair/aq_home.htm)

Annual emissions for this source (the entire plant) are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	TSP .....	12.95
B.	PM <sub>10</sub> .....	4.97
C.	SO <sub>2</sub> .....	1.28
D.	NO <sub>x</sub> .....	19.39
E.	CO .....	4.18
F.	VOC .....	1.58

The annual emission estimations above are for the purpose of determining the applicability of Prevention of Significant Deterioration, nonattainment area, maintenance area, and Title V source requirements of the UAC R307. They are not to be used for purposes of determining compliance.

Approved By:

  
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Ursula K. Trueman, Executive Secretary  
Utah Air Quality Board

## Appendix A

Utah American Energy, Inc.  
Lila Canyon Coal Mine

### **R307-150. Emission Inventories.**

#### **R307-150-1. General Applicability.**

(1) The following sources shall submit an emission inventory report:

- (a) any Part 70 source;
- (b) any source that emits or is allowed under R307 to emit 100 tons per year or more of any regulated air pollutant;
- (c) any source located in Davis, Salt Lake, Utah or Weber County that emits or is allowed under R307 to emit 25 tons per year or more of a combination of PM<sub>10</sub>, sulfur oxides, or oxides of nitrogen;
- (d) any source located in Davis, Salt Lake, Utah or Weber County that emits or is allowed under R307 to emit 10 tons per year or more of volatile organic compounds;
- (e) any source that emits or is allowed under R307 to emit 5 tons per year or more of lead;
- (f) any source that emits or is allowed under R307 to emit 10 tons or more per year of ammonia;
- (g) any source that is allowed under R307 to emit between 90 and 100 tons per year of any regulated air pollutant;
- (h) any source that the executive secretary requires to submit an inventory for any full or partial year on reasonable notice.

### **R307-155. Hazardous Air Pollutant Inventory.**

#### **R307-155-1. General Applicability.**

- (1) The owner or operator of a Part 70 stationary source, either "major source" or "area source" as defined in the Clean Air Act Section 112 (42 U.S.C. 7412), that emits one or more hazardous air pollutants shall submit a hazardous air pollutant inventory.
- (2) The owner or operator of a source which is not a Part 70 stationary source or a "major source" as defined in the Clean Air Act Section 112 (42 U.S.C. 7412) that emits one or more hazardous air pollutants shall submit a hazardous air pollutant inventory at the request of the executive secretary but not more often than once per year.
- (3) Inventory data is not required for each hazardous air pollutant that has a threshold limit value and is emitted in an amount less than the smaller of the following:
  - (a) 500 pounds per year; or
  - (b) an annual emission level calculated to be the applicable threshold limit value - time weighted average (TLV-TWA) expressed in milligrams per cubic meter, or the threshold limit value - ceiling (TLV-C) expressed in milligrams per cubic meter multiplied by the appropriate emission threshold factor in cubic meter pounds per milligram year in Table 1 below.

TABLE 1

CONTAMINANT	FACTOR (in cubic meter pounds per milligram year)
Arsenic	21.22
Benzene	21.22
Beryllium	21.22
Ethylene oxide	21.22
Formaldehyde	15.81
All other acute hazardous air pollutants	15.81
All other chronic hazardous air pollutants	21.22
All other carcinogenic hazardous air pollutants	7.07